5

10

ABSTRACT OF THE DISCLOSURE

A distributed cellular network (100) provides wireless communication with a plurality of mobile stations (102). A plurality of base transceiver station network elements (104) are configured to communicate with the plurality of mobile stations (102) over a wireless medium, wherein each base transceiver station includes a network interface adapted to couple to a network (110). A plurality of base station controller network elements (106) each include a network interface adapted to couple to the network (110). At least one mobile station controller network element (108) includes a network interface adapted to couple to the network (110). The system (100) is configured such that communication traffic among the base transceiver stations (104), the base station controllers (106) and the mobile switching center (108) is load-balanced for efficiency. Advantages of the invention include a combination of low-cost transceiver (104) and flexible deployment to gain communication coverage over a large area at a low cost.